



UNIVERSITÀ DI PAVIA

Corso di Dottorato in Scienze della Terra e dell'Ambiente

FORM PER PROGETTI BANDO DOTTORATO

1. Project title

LET2BE - Linking the Exposed belt to the Buried one: motion of the crust in the Emilian arc of the Northern Apennines

2. Proposer

Surname	Di Giulio
Name	Andrea

3. Research Unit

Surname	Name	Institution
Toscani	Giovanni	DSTA
Barrera	Daniel	DSTA

4. Key words

(Max. 5 – at least 2)

Northern Apennines; Emilian arc; tectonic uplift; buried belt front

5. Abstract

(Max.1.500 characters with spaces)

The northern Apennines is a well known example of collisional belt whose outermost tectonic front is deeply buried under Plio-Quaternary sediments of the Po Plain. Even if it has been widely studied, both through outcrops in the exposed part, and through reflection seismic profiles and well data in its buried part, the link between the outcropping and buried parts of the belt is quite elusive even due to the difficulties in linking subsurface seismically derived information with field work based knowledge. The aim of the project is to better constrain and link these two data sets and providing a 3D stratigraphic-tectonic model of the boundary region between the exposed belt and the subsurface one. The study area will cover an area south of Pavia, coincident with the area of the Pavia CARG sheet: the activities of this phd project and those relative to the surveys of the Pavia sheet will be more or less contemporary. The opportunity to merge subsurface and field data collected during the field geological surveys, provides an almost unique occasion also to investigate longly debated scientific topics like the Stradella fault and/or the different tectonic setting along the eastern and western flanks of the Emilian arc.